

EXHIBIT G

United States Patent & Trademark Office
Patent Trial & Appeal Board

IRON DOME LLC
Petitioner

v.

E-WATCH, INC.
Patent Owner

Petition for Inter Partes Review
of

Patent No. 7,365,871 (to David Monroe)

Titled: Apparatus for Capturing, Converting and Transmitting ...

Issued from: Application No. 10/336,470

Issue date: April 29, 2008

For Paralegal:

Number of Claims Challenged = 15
Power of Attorney enclosed
Fee paid online by credit card

Contact: John Yim
Phone: 703.749.0500
Email: jyim@yimassociates.com

E-Watch, Inc
Exhibit 2009
Petitioner - Iron Dome LLC
Patent Owner - E-Watch Inc
IPR2014-00439

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Exhibit List

- Exh. 1001 U.S. Patent No. 7,365,871 (“challenged patent”)
- Exh. 1002 Parulski et al.; U.S. Patent No. 6,122,526 (“Parulski”)
- Exh. 1003 Reece et al.; U.S. Patent No. 5,893,037 (“Reece”)
- Exh. 1004 “AFFIDAVIT OF DAVID A. MONROE UNDER 37 CFR 1.131” dated Dec. 27, 2004 in the prosecution history of the challenged patent (“Affidavit”)
- Exh. 1005 “OFFICE COMMUNICATION” dated Aug. 9, 2005 in the prosecution history of the challenged patent (“Office Action”)

Citation Form Used

Reference to supporting documents indicated by “@_____”.

Citations to U.S. Patents are shown as [column number : line numbers].

Citations to line-numbered documents are shown as [page number : line numbers].

Claim terms are distinguished from other text by “underlining.”

Issue Presented

The challenged patent was recently asserted in patent infringement lawsuits against mobile smartphones that transmit photo images over wireless cellular networks, such as Apple's iPhone 4S and Samsung's Galaxy SIII. A search of the prior art reveals that the claims are obvious over two patent publications that both disclose a combination camera-phone that transmits digital photos over wireless cellular networks. Simply put, what the challenged patent claims as an invention was already known in the prior art.

I. Introductory Matters

IRON DOMB LLC ("Petitioner") petitions for *Inter Partes Review* ("IPR") of U.S. Patent No. 7,365,871 ("challenged patent"; @Exh. 1001), which is owned by E-WATCH, INC.

A. Relief Requested

Petitioner requests cancellation of claims 1-15 (total of 15 claims) of the challenged patent for obviousness under 35 U.S.C. § 103.

B. Grounds for Standing

Petitioner certifies that the challenged patent is available for IPR and that Petitioner is not barred or estopped from requesting an IPR challenging the patent claims on the grounds identified in this petition.

C. Mandatory Notices

Real Parties-in-Interest: (1) IRON DOMB LLC, a Virginia limited liability company, which is a wholly-owned subsidiary of ROZMED LLC, a Virginia limited liability company; and (2) Steven S. Yu, M.D., an individual residing in Rockville, Maryland and the managing member of ROZMED LLC.

Individual Steven S. Yu, M.D. declares that there are no other parties that are funding this IPR, nor participating in any manner in this IPR; and further that this statement is being made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Related Matters: The challenged patent has been asserted by the patent owner E-Watch, Inc. in litigation against numerous defendants alleging infringement by smartphones that are capable of transmitting photo images over cellular networks. On or about December 9, 2013, the patent owner E-Watch, Inc. filed the following civil actions in the U.S. District Court for the Eastern District of Texas: 2:13-cv-01061 through 01064, 01071, and 01073 through 01078.

Individual Steven S. Yu, M.D. declares that Petitioner is not a party to any of these civil actions, nor has Petitioner been given or taken any direct financial interest relating to the outcome of these civil actions; and further that this statement is being made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

From the challenged patent, a divisional application Serial No. 11/617,509 was granted as U.S. Patent No. 7,643,168. Concurrently with this IPR petition, Petitioner is also filing an IPR petition against U.S. Patent No. 7,643,168.

Electronic Service: Petitioners consent to service by email at: jyim@yimassociates.com.

Lead Counsel	Back-Up Counsel
John J. Yim (Reg. No. 47,197) JOHN J. YIM & ASSOCIATES LLC 7600 Leesburg Pike East Building, Suite 470	Steven S. Yu (Reg. No. 58,776) ROZMED LLC PO Box 10034 Gaithersburg, MD 20898

Tysons Corner, VA 22043 Tel: 703.749.0500 Fax: 202.379.1723 Email: jyim@yimassociates.com	Tel: 202.262.0426 Email: syu@rozmed.com
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II. Prior Art References

A. Earliest possible effective filing date is January 12, 1998

The challenged patent was granted from a divisional of application Serial No. 09/006,073 filed on January 12, 1998. Thus, the earliest possible effective filing date is January 12, 1998.¹ The prior art publications referenced herein are as follows.

1. Parulski et al.; U.S. Patent No. 6,122,526 ('Parulski' @Exh. 1002)²
 § 102(e) prior art date = Apr. 24, 1995
2. Reelee et al.; U.S. Patent No. 5,893,037 ('Reelee' @Exh. 1003)³
 § 102(e) prior art date = Dec. 9, 1994

Neither of the above patent publications were specifically applied in a rejection

¹ We reserve the right to dispute whether the challenged claims should legitimately have the benefit of this or any other earlier filing date (or even the latest filing date, i.e. lack of written support).

² Parulski is a U.S. patent granted from application Serial No. 09/232,594 (filed on Jan. 19, 1999), itself a continuation of application Serial No. 08/842,458 (filed on April 24, 1997), itself a divisional of application Serial No. 08/426,993 that was filed on April 24, 1995. Therefore, Parulski is prior art under at least 35 U.S.C § 102(e).

³ Reelee is a U.S. patent granted from application Serial No. 08/739,237 filed on October 29, 1996, which itself is a continuation of application Serial No. 08/353,023 filed on December 9, 1994. Therefore, Reelee is prior art under at least 35 U.S.C § 102(e).

against the claims during the original prosecution.

B. Swear-Behind Affidavit Under Rule 131

In the prosecution of the challenged patent, the applicant submitted an affidavit under Rule 131 along with evidence to “swear-behind” prior art that the examiner was applying to reject the claims. @Affidavit (Exh. 1004). For point of reference, January 12, 1998 is the earliest possible effective filing date for the challenged patent. @Affidavit 1, ¶ 2. The examiner’s earliest prior art was dated March 18, 1994. @3, ¶ 5.

After enumerating a series of dates and associated actions, the inventor’s affidavit concludes that his invention occurred on March 18, 1993 (or earlier). @5, ¶17. In addition, the inventor declares that there was diligent reduction to practice from conception on March 18, 1993 (or earlier) and over four subsequent years to when the first prototype was made in mid-1997 and when the commercial product was made in late 1997. @4, ¶14 & 5, ¶17. After the Rule 131 affidavit was submitted to the examiner, the examiner sent an “OFFICE COMMUNICATION” indicating that the affidavit was sufficient to overcome four of the six prior art references. @Office Action 2, ¶2 (Exh. 1005).

Petitioner has thoroughly reviewed the inventor’s affidavit. First, it is not clear how the asserted dates and the associated actions firmly establish that the inventor in March 1993, had *full possession* of the invention *as now claimed* in the challenged patent. This is almost five years before the January 1998 filing date. In 1993, the inventor was

working in the field of wireless communication devices, and this work may have been in a direction *towards* the invention described in the January 1998 patent application (as were many of the inventor's peers in this rapidly developing technology at the time). But merely working in the relevant technological field in a direction *towards* the invention does not establish that in 1993, the inventor had *full possession* of the invention *as now claimed* in the challenged patent.

Second, moving the invention date back by *almost five years* before the actual filing date is far beyond the ordinary grace period granted by U.S. patent laws. With the practical understanding that inventors are typically busy people (as well their patent attorneys), having many demands on their time and other important projects requiring their attention, the U.S. patent laws will concede to moving the invention date back a *few days* or even a *few weeks* so long as the inventor demonstrates that he was diligently reducing his invention to practice for that duration. But on its face, asking to have the effective invention date moved back by *almost five years* is out of the question.

In summary, there are legitimate questions about the legal sufficiency of the applicant's attempt to antedate the prior art. If the patent owner wishes to maintain this assertion of prior conception, then the evidence submitted warrants far more scrutiny than what was given by the examiner in the original prosecution of the challenged patent. Petitioner intends to use discovery, as permitted by the IPR rules,

to further investigate this issue.

III. Technical Background & Claim Construction

A. Technical Background of the Challenged Patent

The challenged patent is directed to a cellular communication system that has a camera to capture an image, compress the image, and transmit the image to a remote recipient device over a wireless cellular network. @1:25-36, 64-66. For example, FIG. 7 shows a camera 190 having a lens 192 and viewfinder 194. A cellular phone is integrated into the camera housing so that images can be transmitted to a remote receiving station over a wireless cellular network. @11:16-19. The keypad for the cellular phone is shown on the back display window 198. @11:19-20. FIG. 4 shows an example of a remote receiving station for receiving images from the camera system over the wireless communication channel 32 (see right side of figure). To view the transmitted images, the remote receiving station is equipped with a fax machine 34 (G-III type), personal computer 85, video telephone 89, and server 91. @7:44-48.

B. Claim Construction

In the context of an *inter partes* review, claim terms must be given their broadest reasonable interpretation (“BRI”) in view of the specification.

1. “image capture device”

According to the challenged patent, FIG. 1 shows the simplest embodiment having a “standard analog or digital camera device 10 for capturing a visual image in

the typical fashion.” @5:30-32. Thus, the BRI of this term encompasses, at least, a digital camera or the electronic component of a digital camera that performs the actual image capture, which is typically a charged coupled device (CCD).

2. “digitized framed image”

We refer again to the challenged patent’s statement that FIG. 1 shows the simplest embodiment having a “standard analog or digital camera device 10 for capturing a visual image in the typical fashion.” @5:30-32. For a digital camera, an image captured “in the typical fashion” is a digitized photo image. Thus, the BRI of this term encompasses, at least, a digital photo image.

3. “remote receiving station”

This claim term refers to the recipient device of the wireless transmission. The challenged patent states that its system has versatile capability and “permits transmission of captured data to a standard bi-level facsimile machine ... as well as to other remote receiving devices such as, by way of example, personal computers and network servers.” @2:39-43. FIGS. 1, 2, and 3 show a fax machine 34 as the remote recipient device over wireless communication channel 32. Accordingly, the BRI of the term “remote receiving station” encompasses, at least, fax machines, cellular phones, and personal computers.

4. “alphanumeric input keys”

The challenged patent states that data “may be input from an integrated keyboard or from a remote device.” @2:30-32. For FIG. 7, the challenged patent

explains that the “keypad for the telephone is indicated at 202.” @11:19-20. Thus, the BRI of this term encompass, at least, telephone keypads.

IV. Grounds for Challenge

Petitioner requests cancellation of claims 1-15 of the challenged patent for obviousness over Parulski in view of Reece.

A. Parulski - primary reference

Parulski describes a “combined telephone/camera unit” with a cellular transceiver. @Parulski, Abstract (Exh. 1002). FIGS. 7 and 8 of Parulski show an example in which a “cellular telephone is provided with the components of an electronic image camera to form a combined telephone/camera unit 48.” @4:32-34. As conventional, this cellular phone has an antenna 54, liquid crystal display screen 56, control processing unit 62, and internal bus 60 that is connected to a camera module 68, telephone keypad 58, memory unit 64, and cellular transceiver 66.

B. Reece - secondary reference

Reece is specifically cited by Parulski as being relevant background. @Parulski, face page, R col. top. Moreover, like Parulski, Reece discloses a combined film/digital camera system. @Abstract. The camera system can include a cellular phone for transmitting the images taken by the camera. @Id. Thus, with Parulski specifically citing to Reece on its face page as relevant background, and with Reece indeed being directed to the same topic of camera-phone devices, someone of ordinary skill in the

art reading Parulski would have strong motivation to consider Reele for its further teachings about combination camera-phone devices.

V. Claim Analysis

The challenged claims are obvious over the cellular camera-phone disclosed by Parulski in view of the cellular camera-phone disclosed by Reele.

Independent Claim 1

- a) (claim 1 preamble) “A handheld self-contained cellular telephone and integrated image processing system”

In FIG. 7 of Parulski, the combined cellular camera-phone unit 48, which has an antenna 54, is both portable and wireless. @Parulski 4:34-38 (Exh. 1002).

Moreover, the claims listing in Parulski discloses a “portable handheld telephone.”

@6:15.

- b) (claim 1 preamble) “for both sending and receiving telephonic audio signals”

This claim term is essentially stating that the cellular phone is capable of making and receiving an ordinary voice phone call. Parulski discloses a cellular phone and it should be well-understood that *any* telephone has the ability to receive an ordinary voice call, i.e. “sending and receiving telephonic audio signals.” Otherwise, it would not be called a “phone.”

- c) (claim 1 preamble) “for capturing a visual image and transmitting it to a compatible remote receiving station of a wireless telephone network”

As explained above, we interpret “remote receiving station” to encompass a receiving site that has a fax machine (i.e. the fax machine receives the images transmitted by the cellular phone). @IPR 7. FIG. 7 of Parulski shows a cellular telephone 48 that includes a digital camera. @Parulski 4:34-36. Parulski further explains that the “stored image is then converted to the appropriate fax standard ... and is transmitted to the receiving fax machine using the normal cellular telephone system that includes an RF link from the cellular transceiver 66.” @4:62-65.

- d) (claim 1) “the system comprising: a manually portable housing”

In FIG. 7 of Parulski, the combined cellular camera-phone unit 48, which has an antenna 54, is both portable and wireless. @Parulski 4:34-38. Moreover, the claims listing in Parulski discloses a “portable handheld telephone.” @6:15.

- e) (claim 1) “an integral image capture device comprising an electronic camera contained within the portable housing”

As explained above, a digital camera is representative of an “image capture device.” @IPR 6. In FIG. 7 of Parulski, the combined cellular camera-phone unit 48 is portable. @Parulski 4:34-38. The handheld unit 48 has a “camera module 68.” @4:43-45.

- f) (claim 1) “a display for displaying an image framed by the camera ... [and] commonly movable [with the electronic camera] in the housing when the housing is moved by hand”

This claim term is essentially stating that the cellular phone has a display and that the camera and display are integrated in the same housing. In FIG. 7 of Parulski, the handheld unit 48 has a liquid crystal display screen 56. @Parulski 4:38-39. Parulski explains that the digitized picture data generated by the camera 68 is displayed on the display screen 56. @4:53-55.

- g) (claim 1) “a processor in the housing for generating an image data signal representing the image framed by the camera”

In FIG. 7 of Parulski, the handheld unit 48 has a “camera module 68, which includes the same basic components as illustrated in FIG. 4.” @Parulski 4:43-45. FIG. 4 of Parulski shows an “image signal processor 40 that processes an analog image signal generated by the electronic imaging sensor 36 into digital image data ... [by] an analog-to-digital (A/D) converter.” @3:31-37.

- h) (claim 1) “a memory associated with the processor for receiving and storing the digitized framed image”

Referring to FIG. 7, Parulski explains that the digitized picture data generated by the camera 68 is displayed on the display screen 56 and stored in the memory unit 64. @4:53-55.

- i) (claim 1) “[the digitized framed image] accessible for selectively displaying in the display window and accessible for selectively transmitting over the wireless telephone network the digitized framed image”

Further to the preceding paragraph, Parulski explains that the “stored image is then converted to the appropriate fax standard ... and is transmitted to the receiving fax machine using the normal cellular telephone system that includes an RF link from the cellular transceiver 66.” @4:62-66.

- j) (claim 1) “a user interface for enabling a user to select the image data signal for viewing and transmission”

In FIG. 7 of Parulski, there is a telephone keypad 58 on the cellular phone. @Parulski 4:40. Parulski further explains that the “#” key on the keypad 58 can be used as the image capture switch. @4:51-53. This causes the digitized picture data to be displayed on the display screen 56. @4:55. Parulski further explains: “To transmit the image, the user dials the telephone number of a desired fax machine that is to receive the image using the keypad 58.” @4:56-58. Thus, the keypad 58 is a “user interface” that enables the user to capture the image for viewing (by pressing the “#” key) and transmitting (by dialing the telephone number).

- k) (claim 1) “a telephonic system in the housing for sending and receiving digitized audio signals and for sending the image data signal”

FIG. 7 of Parulski shows the combined camera-phone 48 having a cellular transceiver 66. @Parulski 4:42. Like Parulski, Reece also discloses a camera-phone that transmits digital images through a cellular phone. As such, there is motivation to add

useful features disclosed by Reelev into the camera-phone of Parulski.

FIG. 4 of Reelev shows a cellular phone 28 having a speaker 62 and microphone 64. @Reele 3:64 – 4:2 (Exh. 1003). This cellular phone 28 has a “transmitter/receiver circuit 54 [that] is controlled by a cellular control unit 60.” @4:5-6. The circuit includes an “A/D converter 56 and a D/A converter 58” which work to make analog-digital signal conversions between the speaker 62, microphone 64, antenna 34, and the cellular control unit 60. Someone of ordinary skill in the art would consider this “telephonic system ... for sending and receiving digitized audio signals” in the transceiver circuit of Reelev to be suitable for use in the cellular transceiver 66 circuit of Parulski.

- I) (claim 1) “alphanumeric input keys in the housing for permitting manually input digitized alphanumeric signals to be input to the processor, the telephonic system further used for sending the digitized alphanumeric signals”

As explained above, a telephone keypad is representative of “alphanumeric input keys.” @IPR 7. Parulski explains that to “transmit the image, the user dials the telephone number of a desired fax machine that is to receive the image using the keypad 58.” @Parulski 4:56-58. As shown in FIG. 9 of Parulski, input from keypad 58 is received by control processing unit 62 and memory unit 64 via internal bus 60. Thus, when the user presses keys on the keypad 58, the “alphanumeric” entries are being input into the control processing unit 62 as digital signals. As explained in the preceding paragraph, someone of ordinary skill in the art would consider the

transceiver circuit in the camera-phone of Reeley to be suitable for use in the camera-phone of Parulski. As also explained in the preceding paragraph and shown in FIG. 4 of Reeley, this transceiver circuit of Reeley is equipped with analog-digital converters and circuitry associated with the keypad 32, cellular control unit 60, and transceiver 54 for “sending the digitized alphanumeric signals.”

m) (claim 1) “a wireless communications device adapted for transmitting any of the digitized signals to the compatible remote receiving station”

As explained in the preceding paragraphs, both Parulski and Reeley disclose a camera-phone device that includes a cellular phone to transmit digital photos.

n) (claim 1) “a power supply for powering the system”

Being a portable electronic device, it is understood that the combined camera-phone 48 in FIG. 7 of Parulski has a power supply. But in case there is any doubt, Parulski refers to FIG. 5 and explains that the pen-based computer 12 has a “power switch (not shown) to activate a camera application program stored in a memory unit of the pen-based computer 12, and then flips up the flash unit 24 which causes power to be supplied to the camera module 10 by activating a power switch (not shown).”

@Parulski 3:50-55 (italics added).

Claim 2

Claim 2 depends from claim 1 and specifies that the “display for framing the image to be captured by the image capture device is operable to display the image at the system whereby the image can be viewed and framed prior to capture in the

memory.” This claim term is simply stating that the display screen is functioning as a viewfinder, i.e. allowing the user to see the framed image before snapping a photo.

As explained above, because Reeley also discloses a camera-phone that transmits digital images through a cellular phone, there is motivation to add useful features disclosed by Reeley into the camera-phone of Parulski. Reeley explains how a digital photo is captured and processed:

The digital image signal generated from the image processing circuit 48 is preferably *simultaneously* supplied to the display 20 and the memory unit 52. The operator views the captured image on the display 20 to determine if the subject is *properly framed* and exposed. If the captured image is not acceptable, the operator can erase the image from the memory unit 26 by activating an erase button (not shown) on the operator control interface 22 to send an erase command signal to the camera control unit 50.

@Reeley 5:9-18 (italics added).

This passage indicates that the display 20 in Reeley is being used as the viewfinder. There is no inventive distinction between the different ways in which image data may be held transiently inside the device (e.g. stored in a memory unit and then erased, transfer between different memory units, etc.).

Claim 3

Claim 3 depends from claim 1 and specifies the display is “for viewing alphanumeric messages input at the alphanumeric keys.” In FIG. 7 of Parulski, there

is a telephone keypad 58 on the cellular phone. @Parulski 4:40. Someone of ordinary skill in the art would understand that when the user enters a phone number to dial into the keypad 58, those numerals would appear on the display screen 56. For example, if the user dials the number "312-555-1234" to call a friend in Chicago, those numerals would appear on the display screen 56.

Claim 4

Claim 4 depends from claim 1 and specifies that the system further comprises a "removable memory module ... for storing captured image data signals." As explained above, because Reece also discloses a camera-phone that transmits digital images through a cellular phone, there is motivation to add useful features disclosed by Reece into the camera-phone of Parulski. In the camera-phone of Reece, the "memory unit 52 preferably includes standard PCMLA interface slots into which removable non-volatile flash EEPROM memory cards ... can be inserted." @Reece 3:35-41.

Claim 5

Claim 5 depends from claim 1 and specifies that the display is "for viewing incoming image data signals." As explained above, because Reece also discloses a camera-phone that transmits digital images through a cellular phone, there is motivation to add useful features disclosed by Reece into the camera-phone of Parulski.

Reece discloses a video conferencing capability of the camera-phone system.

Reele explains that the display 20 of the camera could be used to “display an image of a calling party when the operator is using the cellular phone 28, and an image of the operator taken by the camera 10 can be transmitted to the calling party, thereby providing a video conferencing capability.” @Reele 6:5-10. Thus, during a video conferencing session, the display 20 would be used “for viewing incoming image data signals” (i.e. a video of the caller’s face).

Independent Claim 6

- a) (claim 6 preamble) “A handheld cellular telephone having an integrated electronic camera”
- b) (claim 6 preamble) “for both sending and receiving telephonic audio signals”
- c) (claim 6 preamble) “for capturing a visual image”

These elements of independent claim 6 recite substantially the same limitations as elements (a) through (c) of claim 1, and as such, we apply the same analysis for claim 1 set forth above. @IPR 9.

- d) (claim 6 preamble) “converting the visual image to a digitized image data signal”

In FIG. 7 of Parulski, the handheld unit 48 has a “camera module 68, which includes the same basic components as illustrated in FIG. 4.” @Parulski 4:43-45. FIG. 4 of Parulski shows an “image signal processor 40 that processes an analog image signal generated by the electronic imaging sensor 36 into digital image data ... [by] an analog-to-digital (A/D) converter.” @3:31-37.

- e) (claim 6 preamble) “transmitting digitized image data signal via a cellular telephone network”

Parulski explains that the digitized picture data generated by the camera 68 is stored in memory unit 64. @Parulski 4:53-55. Parulski further explains that the “stored image is then converted to the appropriate fax standard ... and is transmitted to the receiving fax machine using the normal cellular telephone system that includes an RF link from the cellular transceiver 66.” @4:62-66.

- f) (claim 6) “the cellular telephone comprising: a manually portable housing supporting the cellular telephone and the integrated electronic camera ... being movable in common with the housing”

In FIG. 7 of Parulski, the combined camera-phone unit 48 is portable. @Parulski 4:34-38. Moreover, the claims listing in Parulski discloses a “portable handheld telephone.” @6:15. The cellular phone and the camera are integrated into the same handheld housing, i.e. “being movable in common.”

- g) (claim 6) “a cellular telephone ... including a transmitter/receiver for transmitting and receiving audio telephone messages over a cellular telephone network”

This claim term is essentially stating that the cellular phone is capable of making and receiving ordinary voice phone calls or voice messages. Parulski discloses a cellular phone and it is well-understood that *any* telephone has the ability to make and receive ordinary voice calls/messages. But in case there is any doubt, the face page of Parulski specifically cites to Reece as relevant background. FIG. 4 of Reece shows a cellular phone 28 having a transmitter/receiver circuit 54. @Reece 3:64-66.

“Cellular band voice transmission signals received by the transmitter/receiver circuit 54 are supplied to a speaker 62 in a conventional manner.” @3:66 – 4:1. Regarding its capability to make phone calls, Rcele states that a “microphone 64 is coupled to the transmitter/receiver circuit 54 in a conventional manner to enable cellular band transmission of voice signals to remote locations.” @4:1-4.

h) (claim 6) “a keypad for entering manually input alphanumeric signals to be transmitted over the cellular telephone network”

In FIG. 7 of Parulski, there is a telephone keypad 58 on the cellular phone. @Parulski 4:40. Parulski explains that to “transmit the image, the user dials the telephone number of a desired fax machine that is to receive the image using the keypad 58,” @4:56-58. Someone of ordinary skill in the art would understand that when the user dials the telephone number “312-555-1234” to reach a fax machine in Chicago, these “alphanumeric signals” are being transmitted to the phone company’s exchange center for connecting to the telephone line “555-1234” somewhere in Chicago.

i) (claim 6) “a display window for viewing the manually input alphanumeric signals”

In FIG. 7 of Parulski, there is a telephone keypad 58 on the cellular phone. @Parulski 4:40. Someone of ordinary skill in the art would understand that when the user enters a phone number to dial into the keypad 58, those numerals would appear on the display screen 56. For example, if the user dials the number “312-555-1234” to call a friend in Chicago, those numerals would appear on the display screen 56.

- j) (claim 6) “an integral electronic camera ... for visually framing a visual image to be captured”

As explained above, because Reece also discloses a camera-phone that transmits digital images through a cellular phone, there is motivation to add useful features disclosed by Reece into the camera-phone of Parulski. Reece explains how a digital photo is captured and processed:

The digital image signal generated from the image processing circuit 48 is preferably *simultaneously supplied to the display 20* and the memory unit 52. The operator views the captured image on the display 20 to determine if the subject is properly framed and exposed. If the captured image is not acceptable ...

@Reece 5:9-13 (italics added). This passage indicates that the display 20 in Reece is being used as the viewfinder for the camera, i.e. “for visually framing a visual image to be captured.”

- k) (claim 6) “a processor associated with the electronic camera for capturing and digitizing the framed image in a format for transmission over the cellular telephone network via the cellular telephone”

In FIG. 7 of Parulski, the handheld unit 48 has a “camera module 68, which includes the same basic components as illustrated in FIG. 4.” @Parulski 4:43-45. FIG. 4 of Parulski shows a schematic block diagram of the internal components of the camera module. @3:23-25. There is an electronic imaging unit 34 that includes a charge coupled device (CCD) sensor 36. @3:27-29. An image signal processor 40 converts the analog image signal generated by the CCD sensor 36 into digital image

data, i.e. analog-to-digital (A/D) conversion. @3:30-33, Parulski further explains that the “stored image is then converted to the appropriate fax standard ... and is transmitted to the receiving fax machine using the normal cellular telephone system that includes an RF link from the cellular transceiver 66.” @4:62-65.

- l) (claim 6) “a memory associated with the processor for receiving and storing the digitized framed image”

This element of independent claim 6 recites substantially the same limitation as element (h) of claim 1, and as such, we apply the same analysis for claim 1(h) set forth above. @IPR 11.

- m) (claim 6) “[the digitized framed image] accessible for selectively displaying in the display window and accessible for selectively transmitting over the cellular telephone network the digitized framed image”

This element of independent claim 6 recites substantially the same limitation as element (i) of claim 1, and as such, we apply the same analysis for claim 1(i) set forth above. @IPR 12.

- n) (claim 6) “a user interface for enabling a user to selectively display the digitized framed image in the display window and subsequently transmit the digitized framed image over the cellular telephone network”

This element of independent claim 6 recites substantially the same limitation as element (j) of claim 1, and as such, we apply the same analysis for claim 1(j) set forth above. @IPR 12.

- o) (claim 6) “an integrated power supply for powering both the cellular telephone and the camera.”

Being a portable electronic device, it is understood that the combined camera-phone 48 in FIG. 7 of Parulski has a power supply. But in case there is any doubt, Parulski refers to FIG. 5 and explains that the pen-based computer 12 has a “power switch (not shown) to activate a camera application program stored in a memory unit of the pen-based computer 12, and then flips up the flash unit 24 which causes power to be supplied to the camera module 10 by activating a power switch (not shown).”

@Parulski 3:50-55 (italics added). For the combined camera-phone 48 in FIG. 7, there is nothing inventive about using the same power supply (e.g. same battery pack) to power both the phone and camera.

Claim 7

Claim 7 depends from claim 6 and specifies that the “display window for viewing the alphanumeric signals is within the display window for framing the visual image.” This claim term is simply stating that the display screen is used by both the phone and camera. This feature is addressed in our analysis for claim 3 set forth above. @IPR 15.

Claim 8

Claim 8 depends from claim 6 and specifies that the cellular telephone further includes a “second memory selectively removable from the housing.” This is substantially the same limitation as recited in claim 4, and as such, we apply the same

analysis for claim 4 set forth above. @IPR 16.

Independent Claim 9

- a) (claim 9) “A combination of handheld cellular telephone and electronic camera comprising: a housing; an electronic camera integral within the housing”
- b) (claim 9) “a display ... for framing the image to be captured by an image capture device and for viewing the image, whereby an operator can view and frame the image prior to capture”
- c) (claim 9) “a processor for processing the image framed by the camera for generating a digitized framed image as displayed in the display”
- d) (claim 9) “a memory associated with the processor for receiving and storing the digitized framed image for selectively displaying the digitized framed image in the display window and for selectively transmitting the digitized framed image over a cellular telephone network”

These elements of independent claim 9 recite substantially the same limitations as claim 1 elements (a), (d), (e), (f), (g), (h), (i), and (k), and as such, we apply the same analysis for claim 1 set forth above. @IPR 9.

Narrower than claim 1, in claim 9 element (b), the display allows the operator to “view and frame the image prior to capture.” (i.e. the display functions as a viewfinder). As explained above, because Reeley also discloses a camera-phone that transmits digital images through a cellular phone, there is motivation to add useful features disclosed by Reeley into the camera-phone of Parulski. Reeley explains how a digital photo is captured and processed:

The digital image signal generated from the image processing circuit 48

is preferably *simultaneously supplied to the display 20* and the memory unit 52. The operator views the captured image on the display 20 to determine if the subject is properly framed and exposed. If the captured image is not acceptable ...

@Reele 5:9-13 (*italics added*). This passage indicates that the display 20 in Reeel is being used as the viewfinder for the camera, i.e. allowing the operator to “view and frame the image prior to capture.”

- e) (claim 9) “a cellular telephone in the housing for accepting and digitizing audio signals to be transmitted and for conveying [sic] received digitized audio signals into acoustic audio”

This claim term is simply stating that the audio signals transmitted and received by the cellular phone are digital signals, as opposed to analog signals. FIG. 4 of Reeel shows a cellular phone 28 having a speaker 62, microphone 64, and transmitter/receiver circuit 54. @Reele 3:64 – 4:2. “Cellular band voice transmission signals received by the transmitter/receiver circuit 54 are supplied to a speaker 62 in a conventional manner.” @3:66 – 4:1. Regarding its capability to make phone calls, Reeel states that a “microphone 64 is coupled to the transmitter/receiver circuit 54 in a conventional manner to enable cellular band transmission of voice signals to remote locations.” @4:1-4. Thus, transmitter/receiver circuit 54 of Reeel receives and transmits “audio signals.”

It is not clear whether the “audio signals” being received and transmitted by Reeel are in digital or analog form. But in any case, connected to the

transmitter/receiver circuit 54 are an “A/D converter 56 and a D/A converter 58” that work to make analog-digital signal conversions between the speaker 62, microphone 64, antenna 34, and the cellular control unit 60. There is nothing inventive about having the cellular phone receive and transmit “digitized audio signals” instead of analog audio signals. This simply depends on whether the cellular phone will be operating on analog or digital networks (2G, 3G, and so forth).

- f) (claim 9) “the cellular telephone further for transmitting and receiving non-audio digital signals including digitized image signals”

Because Reece also discloses a camera-phone that transmits digital images through a cellular phone, there is motivation to add useful features disclosed by Reece into the camera-phone of Parulski. We refer to our analysis for claim 5 above regarding the Reece camera-phone’s video conferencing capability. @IPR 16. Thus, during a video conferencing session, Reece’s camera-phone would be used “for transmitting and receiving non-audio digital signals including digitized image signals” (i.e. a video of the caller’s face).

- g) (claim 9) “alphanumeric input keys in the housing for permitting manually input alphanumeric signals to be input into the cellular telephone”

This element of independent claim 9 recites substantially the same limitation as element (I) of claim 1, and as such, we apply the same analysis for claim 1(I) set forth above. @IPR 13.

- h) (claim 9) “the manually input alphanumeric signals being presented in the display”

This element of independent claim 9 recites substantially the same limitation as claim 3, and as such, we apply the same analysis for claim 3 set forth above. @IPR 15.

- i) (claim 9) “a power supply in the housing for powering the processor, the cellular telephone, the display and the camera”

This element of independent claim 9 recites substantially the same limitation as element (o) of claim 6, and as such, we apply the same analysis for claim 6(o) set forth above. @IPR 22.

- j) (claim 9) “a wireless transmitter/receiver in the housing for transmitting digital signals sent from and receiving digital signals sent to the cellular telephone”

As explained above, because Reece also discloses a camera-phone that transmits digital images through a cellular phone, there is motivation to add useful features disclosed by Reece into the camera-phone of Parulski. FIG. 4 of Reece shows a cellular phone 28 having a speaker 62 and microphone 64. @Reece 3:64 – 4:2. This cellular phone 28 has a “transmitter/receiver circuit 54 [that] is controlled by a cellular control unit 60.” @4:5-6. The circuit includes an “A/D converter 56 and a D/A converter 58” which work to make analog-digital signal conversions between the speaker 62, microphone 64, antenna 34, and the cellular control unit 60. Reece’s transmitter/receiver circuit 54 in conjunction with its analog-digital converters are capable of “transmitting ... and receiving digital signals.” Someone of ordinary skill in the art

would consider this circuit in Reece to be suitable for use in the cellular transceiver 66 circuit of Parulski.

- k) (claim 9) “digital/analog circuits for convening [sic] digital commands to analog signals for controlling gain, pedestal, setup, white clip, lens focus, white balance, lens iris, lens zoom and other functions of the camera from a local input device, a remote device or as automatic or programmed functions.”

In Parulski's digital camera, the “electronic imaging unit 34 is coupled to an image signal processor 40 that processes an analog image signal generated by the electronic imaging sensor 36 into digital image data.” @Parulski 3:30-32. In the image signal processor 40, “the analog image signal is supplied to a *gain stage*, a correlated double sampling (CDS) circuit and then an analog-to-digital (A/D) converter.” @3:35-37 (italics added). Moreover, the “digitized output signal from the A/D converter is processed ... which performs gamma correction and *white balancing*.” @3:38-40 (italics added). Parulski's digital camera also has a camera control processor 42 and a driver unit 46 that controls the operation of the lens aperture 28 (i.e. “lens iris”). @3:42-47.

Parulski does not indicate whether the control signals are analog or digital. However, in this context, there is no inventive distinction between whether the control signals are digital or analog. This simply depends on whether the off-the-shelf electromechanical component (e.g. lens motor) of the camera are designed to receive analog or digital commands.

Claim 10

Claim 10 depends from claim 9 and specifies that the combination further comprises a “removable memory module removably housed in the housing for storing captured image data signals.” This is substantially the same limitation as recited in claim 4, and as such, we apply the same analysis for claim 4 set forth above. @IPR 16.

Claim 11

Claim 11 depends from claim 9 and specifies that the display is “for viewing image data signals received by the receiver.” Regarding the term “receiver,” we interpret this to mean the “wireless transmitter/receiver” recited in claim 11(j). We refer to our analysis for claim 5 above regarding the Reece camera-phone’s video conferencing capability. @IPR 16. Thus, during a video conferencing session, Reece’s camera-phone would be used “for viewing image data signals received by the receiver” (i.e. a video of the caller’s face).

Independent Claim 12

- a) (claim 12) “A combination of handheld wireless telephone and digital camera comprising:”
- b) (claim 12) “a handheld housing which supports both the wireless telephone and the digital camera, the wireless telephone and electronic camera being commonly movable with the housing”

- c) (claim 12) “a display supported in the housing for framing an image to be captured and for viewing the image, whereby an operator can view and frame the image prior to capture”
- d) (claim 12) “a processor for processing the image framed by the camera for generating a digitized framed image as displayed in the display”
- e) (claim 12) “a memory associated with the processor for receiving and storing the digitized framed image, for selectively displaying in the display window and for selectively transmitting over a wireless telephone network the digitized framed image”

These elements of independent claim 12 recite substantially the same limitations as claim 1 elements (a), (d), (e), (f), (g), (h), and (i), and as such, we apply the same analysis for claim 1 set forth above. @IPR 9. Narrower than claim 1, in claim 12 element (c), the display allows the operator to “view and frame the image prior to capture.” As explained above, because Reele also discloses a camera-phone that transmits digital images through a cellular phone, there is motivation to add useful features disclosed by Reele into the camera-phone of Parulski. Reele explains how a digital photo is captured and processed:

The digital image signal generated from the image processing circuit 48 is preferably *simultaneously supplied to the display 20* and the memory unit 52. The operator views the captured image on the display 20 to determine if the subject is properly framed and exposed. If the captured image is not acceptable ...

@Reele 5:9-13 (italics added). This passage indicates that the display 20 in Reele is being used as the viewfinder for the camera, i.e. allow the operator to “view and frame the image prior to capture.”

- f) (claim 12) “the wireless telephone being selectively operable to accept and digitize audio signals to be transmitted ... [and] convert received digitized audio signals into acoustic audio”

This claim term is simply stating that the audio signals transmitted and received by the cellular phone are digital signals, as opposed to analog signals. This element of claim 12 recites substantially the same limitation as element (e) of claim 9, and as such, we apply the same analysis for claim 9(e) set forth above. @IPR 24.

- g) (claim 12) “the wireless telephone being selectively operable to transmit and receive non-audio digital signals, the non-audio digital signals including a selected digitized framed image”

This element of claim 12 recites substantially the same limitation as element (f) of claim 9, and as such, we apply the same analysis for claim 9(f) set forth above.

@IPR 25.

- h) (claim 12) “a set of input keys supported by the housing to permit alphanumeric signals to be manually input by an operator into the wireless telephone, the alphanumeric signals being presented in the display for viewing by the operator”

This element of claim 12 recites substantially the same limitation as elements (h) and (i) of claim 6, and as such, we apply the same analysis for claim 6(h) and (i) set forth above. @IPR 19.

- i) (claim 12) “a power supply supported by the housing”

This element of claim 12 recites substantially the same limitation as element (n) of claim 1, and as such, we apply the same analysis for claim 1(n) set forth above.

@IPR 14.

- j) (claim 12) “the wireless telephone including a wireless transmitter/receiver for transmitting digital signals sent from and receiving digital signals sent to the wireless telephone”

This element of claim 12 recites substantially the same limitation as element (j) of claim 9, and as such, we apply the same analysis for claim 9(j) set forth above.

@IPR 26.

- k) (claim 12) “at least one camera control circuit connected to an input device for controlling at least one of the following functions: gain, pedestal, setup, white clip, lens focus, white balance, lens iris, lens zoom.”

In Parulski's digital camera, the “electronic imaging unit 34 is coupled to an image signal processor 40 that processes an analog image signal generated by the electronic imaging sensor 36 into digital image data.” @Parulski 3:30-32. In the image signal processor 40, “the analog image signal is supplied to a *gain stage*, a correlated double sampling (CDS) circuit and then an analog-to-digital (A/D) converter.” @3:35-37 (*italics added*). Moreover, the “digitized output signal from the A/D converter is processed ... which performs gamma correction and *white balancing*.” @3:38-40 (*italics added*). Parulski's digital camera also has a camera control processor

42 and a driver unit 46 that controls the operation of the lens aperture 28 (i.e. “lens iris”). @3:42-47.

Claim 13

Claim 13 depends from claim 12 and specifies that the device further comprises a “removable memory module removably housed in the housing for storing captured images.” This is substantially the same limitation as recited in claim 4, and as such, we apply the same analysis for claim 4 set forth above. @IPR 16.

Claim 14

Claim 14 depends from claim 12 and specifies that the display is also “for viewing images received by the receiver.” Regarding the term “receiver,” we interpret this to mean the “wireless transmitter/receiver” recited in claim 12(j). We refer to our analysis for claim 5 above regarding the Reece camera-phone’s video conferencing capability. @IPR 16. Thus, during a video conferencing session, Reece’s camera-phone would be used “for viewing images received by the receiver” (i.e. a video of the caller’s face).

Claim 15

Claim 15 depends from claim 12 and specifies the “housing having a first portion, the housing having a second portion joined to the first portion, at least one of the first portion and the second portion being moveable in relation to the other of the first portion and the second portion, the first portion and the second portion also

being commonly movable by hand when fixed in relation to each other." This claim term is essentially stating that the housing has two portions that are moveable relative to each other.

As shown in FIG. 7 of Parulski, on top of the camera-phone 48, there is a lens 50, a flip-up flash unit 52, and an antenna 54. @4:36-38. As seen in the drawing figure, flipping up the flash unit 52 exposes the camera lens 50. The flip-up flash unit 52 corresponds to a "second portion being moveable in relation to" the main body of the camera-phone 48.

Conclusion

For the foregoing reasons, Petitioner respectfully requests that *inter partes* review be instituted against the challenged patent.

JOHN J.YIM & ASSOCIATES LLC

/John J. Yim/

John J. Yim

Reg. No. 47,197

Lead Counsel for Petitioners